

Appl. No. 10/783,555
Amdt. Dated December 15, 2006
Reply to Office action of September 18, 2006

REMARKS

This is a full and timely response to the non-final Office action mailed September 18, 2006. Reexamination and reconsideration in view of the foregoing amendments and following remarks is respectfully solicited.

Claims 1-3 and 6-12 are now pending in this application, with Claim 1 being the independent claim. Claims 1, 11, and 12 have been amended, and Claims 4, 5, and 13-36 have been canceled herein. No new matter is believed to have been added.

Claim Objections

Claims 11 and 12 were objected to for positively reciting features with a lack of antecedent basis. The claims have been cosmetically amended herein to cure this deficiency, and withdrawal of the objections is therefore solicited.

Rejections Under 35 U.S.C. § 103

Claims 1-3, 6, 7, and 10 were rejected under 35 U.S.C. § 103 as allegedly being unpatentable over U.S. Patent Nos. 4,313,524 (Rose) and 5,945,643 (Casser); Claim 4 was rejected under 35 U.S.C. § 103 as allegedly being unpatentable over Rose, Casser, and U.S. Patent No. 5,929,395 (Bizlewicz); Claim 4 was rejected under 35 U.S.C. § 103 as allegedly being unpatentable over Rose, Casser, Bizlewicz, and U.S. Patent No. 5,135,073 (Nelson); and Claims 8, 9, 11, and 12 were rejected under 35 U.S.C. § 103 as allegedly being unpatentable over Rose, Casser, and U.S. Patent No. 4,313,524 (Haas et al.). These rejections are respectfully traversed.

Independent Claim 1 relates to an integrated noise suppression acoustic panel that includes a bulk foam absorber disposed between a back plate and a perforated face plate, and recites, inter alia, the bulk foam absorber comprising a thermoset material and having a density gradient between the first side and second side, wherein the density of the bulk foam absorber at the first side is greater than the density of the bulk foam absorber at the second side.

Rose relates to a bulk acoustic absorber, and discloses a structure that includes an open cell foam disposed between a back plate and a face plate. Casser relates to a vibration dampening material and was applied in the Office action for allegedly disclosing the use of a

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thermoset material and a reinforcement material. While not conceding that the combination of Rose and Casser suggest the combination alleged in the Office action, Applicants nonetheless note that the Office action does admit that these references, either alone or in combination, fail to disclose the absorbing having a density gradient between the first side and second side, and wherein the density of the bulk foam absorber at the first side is greater than the density of the bulk foam absorber at the second side, as is recited in independent Claim 1.

To make up for the above-noted deficiencies, the Office action cites Bizlewicz and Nelson. Specifically, Bizlewicz was cited for allegedly teaching a density gradient between first and second sides of an absorber, and Nelson was cited for allegedly teaching the density of the bulk foam absorber at the first side is greater than the density of the bulk foam absorber at the second side. Bizlewicz relates to a vibration absorption device, and discloses in one embodiment a synthetic polymeric foam core (82) having first and second sides (84), and that has been compressed such that the density of the core in regions (83) adjacent the sides (84) is greater than the density at the central region (86). Nelson relates to an acoustic partition panel, and discloses in some embodiments a structure including core constructed of an alternating series of panels (42, 43 and 52, 53) of different material densities. In one particular example, alternating panels having densities of 3 lb/ft³ and 1.5 lb/ft³ are used.

From the foregoing it is seen that although Bizlewicz discloses a density gradient between the first and second sides, it fails to disclose or suggest that the density at one side is greater than the other. Indeed, Bizlewicz explicitly teaches away from such a configuration. Moreover, Nelson teaches a plurality of individual, alternating panels, of different densities, but the densities of each of the individual panels is constant.

Hence, Applicants submit that neither Bizlewicz nor Nelson disclose or even remotely suggest at least the above-identified feature of independent Claim 1. Namely, the bulk foam absorber comprising a thermoset material and having a density gradient between the first side and second side, wherein the density of the bulk foam absorber at the first side is greater than the density of the bulk foam absorber at the second side. Applicants further submit that the combination of Bizlewicz and/or Nelson with Rose and Casser at best suggest providing a foam bulk absorber having substantially equal densities at the first and second sides that are greater

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than the density near the central region, or constructing the absorber from a plurality of individual panels of differing density. Applicants further note that Haas et al. has been reviewed and is not understood to make up for at least the above-noted deficiencies of the other references.

In view of the foregoing, Applicants request reconsideration and withdrawal of the § 103 rejections.

Conclusion

Based on the above, independent Claim 1 is patentable over the citations of record. The dependent claims are also deemed patentable for the reasons given above with respect to the independent claim and because each recite features which are patentable in its own right. Individual consideration of the dependent claims is respectfully solicited.

The other art of record is also not understood to disclose or suggest the inventive concept of the present invention as defined by the claims.

Hence, Applicant submits that the present application is in condition for allowance. Favorable reconsideration and withdrawal of the objections and rejections set forth in the above-noted Office Action, and an early Notice of Allowance are requested.

If the Examiner has any comments or suggestions that could place this application in even better form, the Examiner is requested to telephone the undersigned attorney at the below-listed number.

If for some reason Applicant has not paid a sufficient fee for this response, please consider this as authorization to charge Ingrassia, Fisher & Lorenz, Deposit Account No. 50-2091 for any fee which may be due.

Respectfully submitted,

INGRASSIA FISHER & LORENZ

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